

Georgia DOT Bridge No. 145-00315-017.37E  
Spanning the Southern Railroad on State Route 315  
Ellerslie Vicinity  
Harris County  
Georgia

HAER No. GA-79

HAER  
GA  
73-ELLE.Y  
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
Southeast Regional Office  
National Park Service  
U.S. Department of the Interior  
Atlanta, Georgia 30303

# HISTORIC AMERICAN ENGINEERING RECORD

Georgia DOT Bridge No. 145-00315-017.37E

HAER No. GA-79

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**Location:** Spanning the Southern Railroad on State Route 315,, 0.2 mile west of junction of SR 85, southwest of Ellerslie, Harris County, Georgia

UTM: Northing - 361610

Easting - 705365

Quad: Midland, Georgia (U.S.G.S. 7.5 minute)

**Date of Construction:** 1935

**Designer:** Unknown

**Builder:** Unknown

**Present Owner:** Georgia Department of Transportation  
#2 Capitol Square  
Atlanta, Georgia 30334

**Present Use:** Vehicular bridge; to be demolished in 1992

**Significance:** Georgia DOT Bridge No. 145-00315-017.37E is significant because it embodies the distinctive characteristics of a continuous steel stringer bridge constructed in the 1930s.

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**Date:** September 1992

GDOT Bridge No. 145-00315-017.37E is located on State Route 315 spanning the abandoned Southern Railroad bed near Ellerslie in Harris County, Georgia. This is the original location of the bridge. The current setting of the bridge, which is rural, is compatible with the setting at the time of the bridge's construction.

This bridge is a continuous steel stringer with steel I-beams and a concrete "fence post" type balustrade. The substructure is treated timber, while the superstructure is composed of steel stringers with concrete deck and railing. This bridge has three main spans and four approach spans. The structure measures 152 feet in length by 23.8 feet in width.

This bridge was built in 1935. Components of the structure routinely have been repaired and/or replaced with similar materials.

Extant continuous steel stringer bridges in Georgia date from 1914 to the present. The bridge is significant because it embodies the distinctive characteristics of a continuous steel stringer bridge constructed during the 1930s.

Continuous stringers are commonly found in Georgia. There are numerous extant examples of this type found throughout the State. This bridge is representative of those built during the 1930s which utilized treated timber pilings in the substructure and concrete deck and railing in the superstructure. This bridge is also one of approximately 560 bridges of this type found in the State and one of five found in Harris County built prior to 1942.

Georgia DOT Bridge #145-00315-017.37E is one of many of its type designed and built by the State Highway Department during the 1930s. Prior to 1930, a variety of bridge types, styles, and materials were used. Beginning around 1930, the State Highway department began to use a somewhat standardized form for most new bridges which used timber pilings in the substructure. As stated in the Fourteenth Report of the State Highway Board, "on numerous occasions where the bridge site warranted a low-cost structure without sacrificing strength and durability, a type of bridge was constructed, consisting of treated timber pile substructure with I-beam joists and concrete floor slab and rail. This type proved very economical and satisfactory." Less expensive than steel or reinforced concrete, wood substructures enabled the department to satisfy transportation needs throughout the State and resulted in a dramatic increase in bridge construction.

The demands for material and manpower during World War II practically stopped the construction of bridges from 1942 to 1945. Only essential projects that provided access to war-related industries and roads on the Strategic Highway Network were placed under construction.

In the post-war years, timber was no longer used as a bridge-building material by the department. According to the Twenty-Second Report of the State Highway Department, "timber of sizes and stress grades required for the construction of timber bridges has all but disappeared from the local market. Delivered price of timber shipped from the Pacific Coast is too high for consideration. It has, therefore, been necessary for the Division of Bridge and Road Design to develop a design for a low-cost bridge built

of available material that will meet the need formerly filled by timber bridges. This design provides a bridge of steel and concrete, stronger and more durable than timber bridges and costing but a small fraction more."

Timber substructures are an identifying characteristic of many of the bridges built in Georgia from 1930 to 1942. It was also during this time that reinforced concrete balustrades, with horizontal and/or vertical members, emerged as a popular material for bridge railing. Concrete balustrades, with horizontal members resembling a fence rail, such as those found on the subject bridge, were used extensively through the 1950s and 1960s.

#### **SOURCES**

State Highway Board of Georgia. Fourteenth Report of the State Highway Board of Georgia. 1932, p. 167.

State Highway Board of Georgia. Twenty-Second Report of the State Highway Department of Georgia. 1947-1948, p. 59